

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Application No. 10/788,471
Attorney Docket No.: Q79183

REMARKS

Claims 1-15 are all the claims pending in the application. By this Amendment, Applicant editorially amends paragraphs no. [015] and [016] of the specification and claims 10-12. Applicant also amends claims 1, 14, and 15. Support for the amendments of the claims is found, e.g., at pages 2-4 of the specification. No new matter is added. Reconsideration and allowance of claims 1-15 are respectfully requested in view of the following remarks.

I. Preliminary Matters

Applicant thanks the Examiner for acknowledging Applicant's claim to foreign priority and for indicating receipt of the certified copy of the priority document. The Examiner is requested to indicate acceptance of the drawings in the next office communication.

II. Summary of Office Action

Claims 10, 11, and 12 are objected to for minor informalities, claims 1-4 and 9-15 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 7,103,344 to Menard (hereinafter "Menard"), and claims 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Menard in view of U.S. Patent No. 6,983,162 to Garani et al. (hereinafter "Garani").

III. Objection to the Claims

The Examiner objected to claims 10-12 for reasons set forth at page 2 of the Office Action. Applicant amends claims 10-12 to cure minor informalities.

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IV. Prior Art Rejections

1. Claims 1-4 and 9-13 stand rejected under 35 U.S.C. 102(e) as being anticipated by Menard. Applicant respectfully traverses this rejection. “A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *See MPEP §2131.*

Applicant submits that Menard fails to disclose or suggest: “providing a first radio link . . . for transmitting safety related information data; and providing a second radio link . . . for transmitting non-safety related information data; wherein the first radio link and the second radio link are two physical channels that contemporaneously and continuously transmit information data in parallel”, as recited in claim 1.

Regarding this limitation, the Examiner refers to figure 2 and to col. 1, lines 16-25, col. 3, lines 52-59, col. 4, lines 8-11, and col. 13, lines 3-18 of Menard. The Examiner contends that Menard discloses a method for transmitting data between a mobile radio transmitter and a radio receiver of a machine or plant, comprising providing a first and a second radio link, according to claim 1. Applicant respectfully disagrees.

The Examiner’s characterization of Menard is incorrect. Figure 2 is described in Menard starting at col. 3, line 60. Specifically, Menard discloses “an apparatus and method to activate a wireless device that is powered off.” *See col. 1, lines 11-12. Only one physical channel*, the primary network - figure 2, component 180 - is used for information data transmission, whereas the companion network - figure 2, component 120 - is used to “send [radio frequency energy] RFE 123 to excite companion wake-up receiver 320.” *See col. 4, lines 3-4.* Thus, there is no teaching or suggestion of “providing a first radio link . . . and . . . a second radio link . . . for

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transmitting . . . information data; wherein the first radio link and the second radio link are two physical channels that contemporaneously and continuously transmit information data in parallel.”, as recited in claim 1.

Furthermore, Menard discloses that “[d]evice 300 [of the companion network 120 is] normally ‘sleeping’.” *See* col. 4, lines 28-29. By contrast, instead of using a companion network to activate a primary data transmission network, Applicant provides “two physical channels that contemporaneously and continuously transmit information data in parallel”, as recited in claim 1. These two channels are set up by the first and the second radio link. Neither of the two channels is ever ‘sleeping’ so that a continuous transmission of information data is ensured.

In another embodiment of Menard, a remote system initiates communication with a sleeping device through a second companion network. “Once the communication is initiated, it is conducted without system 200 [of the companion network 120].” *See* col. 5, lines 59-60. Again, after the primary network is woken up, only one physical channel is used in Menard to transmit information data.

In addition, Menard does not disclose or suggest two physical channels, both contemporaneously and continuously transmitting information data. Although not only the wake-up signal itself is transmitted over the companion network 120, this network only “carr[ies] identification information, security checks, or instructions.” *See* col. 2, lines 27-28. In another embodiment, the companion “network 120 provides connection information to accelerate the link-up of [primary] network 180. . . . [T]his data may include timing data, frequency hopping patterns, network protocols, etc.” *See* col. 5, lines 26-30.

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Therefore, the data transmitted in Menard's companion network 120 is clearly not information data in the sense of claim 1, because it only contains control data that is typically used in data communications networks to establish and maintain the physical channel.

As a result, Menard fails to disclose the first radio link and the second radio link being two physical information data channels that contemporaneously and continuously transmit the information data in parallel. Consequently, Menard does not describe each and every element as set forth in the claim, either expressly or inherently. Therefore, Applicant submits that Menard fails to anticipate claim 1, and respectfully requests that the rejection of claim 1 over Menard be reconsidered and withdrawn. Claims 2-8 and 10-13 are patentable at least by virtue of their dependency on claim 1.

Claim 9 is also rejected under 35 U.S.C. 102(e) as being anticipated by Menard. Regarding claim 9, the Examiner relied on Menard, col. 4, lines 12-16. Applicant respectfully traverses this rejection. The cited reference only teaches that both links "might [operate] in the same or different frequency bands." That does not necessarily mean that both links are set up via a single radio system as claimed in claim 9. By contrast, Menard teaches that the links "might share one or more components, such as the same antenna, the same excitors or transmitters and the same control circuits including processors and memory." However, the links can not share the complete radio system because the radio system of the network, is normally 'sleeping', as already demonstrated above.

Consequently, Menard additionally fails to describe each and every element as set forth in claim 9, either expressly or inherently. Therefore, Applicant submits that Menard also fails to

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anticipate claim 9, and respectfully requests that the rejection of claim 9 over Menard be reconsidered and withdrawn.

Claims 14 and 15 also stand rejected under 35 U.S.C. 102(e) as being anticipated by Menard. Applicant respectfully traverses this rejection.

Applicant submits that Menard fails to disclose or suggest: “A radio transmitter configured to transmit data to a radio receiver of a machine or plant”, as recited in claim 14, and “A radio receiver of a machine or plant, configured to receive data from a radio transmitter”, as recited in claim 15, “wherein the first radio link and the second radio link are two physical channels that contemporaneously and continuously transmit the information data in parallel.”, as recited in claims 14 and 15.

Regarding this limitation, Applicant has already demonstrated that Menard does not disclose or suggest two physical information data channels that contemporaneously and continuously transmit information data in parallel.

Consequently, Menard does not describe each and every element as set forth in claims 14 and 15, either expressly or inherently. Therefore, Applicant submits that Menard also fails to anticipate claims 14 and 15, and respectfully requests that the rejection of claims 14 and 15 over Menard be reconsidered and withdrawn.

2. Claims 5-8 are rejected under 35 U.S.C 103(a) as being unpatentable over Menard as applied to claim 1, and further in view of U.S. Patent No. 6,983,162 to Garani et al. (hereinafter “Garani”).

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Regarding claim 5, the Examiner acknowledges that Menard does not teach “using the first radio link to transmit duplicates of the safety related information”, as recited in claim 5. The Examiner, however, contends that Garani cures the deficiency. Applicant has carefully studied the combined disclosure of Menard and Garani, and Applicant respectfully disagrees.

The reference cited by the Examiner teaches that “[a]s particular transmissions require increased reliability, . . . , these transmissions are provided with increased amounts of error protection and thereby redundancy.” *See* col. 2, lines 53-57. However, the increase of reliability is achieved in Garani by “providing enhanced data rates.” *See* col. 2, line 61. In particular, to increase reliability in wireless communications that use the Opportunity Driven Multiple Access (ODMA) mode proposed in UMTS, “a mobile can ‘connect’ to a network through another mobile [so that it is possible] to allocate part of the system resources for mobile to mobile communication.” *See* col. 3, lines 1-5.

By contrast, Garani does not teach transmitting duplicates of the safety related information, as recited in claim 5. Providing enhanced data rates and allocation of system resources for mobile to mobile communication clearly does not suggest that information is duplicated. Consequently, it would not have been obvious to one of the ordinary skill in the art at the time the invention was made, to modify or combine Menard with Garani to cure said deficiency.

For at least those reasons presented above, Applicant respectfully requests that the rejection of claim 5 be reconsidered and withdrawn. Claims 6-8 are patentable at least by virtue of their dependency on claim 5.

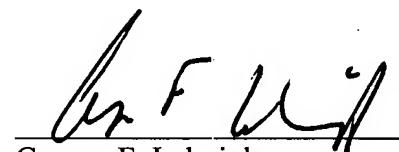
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V. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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